NETWORK ROUTER HAVING EMBEDDED MEMORY

ABSTRACT

A network router makes use of embedded memory and external memory to handle packet buffering requirements for inbound and outbound packets. In particular, the router incorporates an embedded memory device to buffer first packets. This embedded memory device is used instead of a conventional external memory device, making pins that would otherwise be used to communicate with such an external memory device available for other purposes, such as for communicating with an external memory device that buffers second data packets. As a result, using additional pins allows the router to communicate with the external memory device with increased bandwidth, thereby improving the bandwidth of the router.